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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,066	01/05/2004	Shu-Heng Sun	LP3004-3836	1271

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TAIWAN

11/14/2007

EXAMINER
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RODRIGUEZ, WILLIAM H

ART UNIT	PAPER NUMBER
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3746

MAIL DATE	DELIVERY MODE
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11/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/751,066

Applicant(s)

SUN, SHU-HENG

Examiner

/William H. Rodriguez/

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 and 5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1 and 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This office action is in response to the amendment and remarks filed 10/03/2007.

1. This application is in condition for allowance except for the following formal matters:

#### *Claims*

2. The incorporation of claims 2-4 into independent claim 1 has overcome the 35 USC 102 (b) rejection. However, the claims still fail to conform with current U.S. Patent practice. In order to expedite prosecution of the application and to help pro-se applicant, examiner has taken the time to correct and re-write the pending claims 1 and 5 so that these are conforming with current U.S. Patent practice. The following claims are drafted by the examiner and considered to distinguish patentably over the art of record in this application. These claims are presented to applicant for consideration:

Claim 1. A liquid fuel combustion machine having water injection comprising: a combustion chamber having an outward cambered front surface, a tapered rear surface, an exhaust nozzle at a distal end of the rear surface having a reduced opening for accelerating and discharging combustion products generated within said combustion chamber and a check valve pivotally installed on the exhaust nozzle for selectively controlling the discharge of said combustion products; the outward cambered front surface of the combustion chamber including a plurality of first holes for delivering a first fluid and a plurality of second holes for delivering a second fluid into said combustion chamber; a plurality of first nozzles being inserted into said plurality of first holes for delivering said first fluid, wherein said first fluid is water; a plurality of fuel gasifying tubes inserted into said plurality of second holes for delivering said second fluid, each gasifying tube being connected to an oil tube and an air tube, said oil tube being fluidly connected to an oil pump and an oil tank, said air tube being fluidly connected to an air box and an air compressor, an oil-fuel from said oil tank is atomized within each of said plurality of gasifying tubes by the compressed air from said air compressor, wherein said second fluid is the atomized oil-fuel, each of the oil tube and the air tube includes valves operable to control the atomization of said oil-fuel, wherein said atomized oil-fuel is delivered into the combustion chamber through said plurality of second holes located on said combustion chamber outward cambered front surface.

Claim 5. The liquid fuel combustion machine having water injection as claimed in claim 1, further comprising a plurality of water injection nozzles located on a lateral peripheral surface of the combustion chamber downstream of said outward cambered front surface and being selectively operable to inject water into said combustion chamber, each of said water injection nozzles being fluidly connected to a water pump and a water storage tank.

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***Drawings***

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because **in the current drawings the lines, numbers & letters are not uniformly thick and well defined, clean and have poor line quality**. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Contact information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodríguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William H. Rodríguez/  
Primary Examiner  
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